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# The ecosystem service approach to marine mammal management - benefits and limitations

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The ecosystem service approach has been suggested as a new paradigm in nature management and has found its way into the academic literature as well as global and regional policy frameworks. By integrating methodologies from humanities, social and natural sciences it attempts to provide decision makers with a holistic perspective on the complex nature of the direct and indirect ways that well-functioning ecosystems benefit our wellbeing. This talk will demonstrate what an ecosystem service approach to marine mammal management could look like and discuss its challenges by emphasizing its demand for data, methods and potential outputs. In general, the approach appears to have a high demand for precise but complex models capable of integrating data on many scales and from many different academic disciplines. In conclusion the ecosystem service approach can be a beneficial science-policy tool for mapping when and where specific simple ecosystem services are provided. However, our theoretical and empirical uncertainties make the framework incapable of providing us with accurate predictive models, which can be used to predict the economic consequences of small-scale regulations of stocks of apex predators such as marine mammals. Questions regarding whether population reductions of marine mammals in an area could increase the overall production of ecosystem services is therefore not possible to answer.